

REMARKS

Reconsideration based on the previous amendments and following remarks is respectfully requested.

Claims 1, 3-13 and 15 are pending. By this Amendment, claims 2 and 14 are cancelled, claims 1 and 8 are amended, claim 12 is amended to correct an obvious typographical error, and new claim 15 is added.

Applicants appreciate the Examiner's indication that claims 4 and 12 contain allowable subject matter. New claim 15 corresponds to claim 4, placed in independent form.

The Office Action rejects claims 1-3, 5, 10, 11, 13 and 14 under 35 U.S.C. §102(b) over JP 11-23179 to Kusuvara; rejects claims 8 and 9 under 35 U.S.C. §103(a) over Kusuvara in view of JP 2002-213764 to Futagami; rejects claims 8 and 9 under 35 U.S.C. §103(a) over Futagami in view of JP 10-038302 to Itagaki; rejects claim 6 under 35 U.S.C. §103(a) over Kusuvara in view of JP 2003-028594 to Kitazawa et al.; and rejects claim 7 under 35 U.S.C. §103(a) over Kusuvara in view of JP 11-281280 to Mukoda et al. These rejections are respectfully traversed.

Applicants' independent claim 1 is directed to an indoor unit of an air conditioner. A plurality of fin-tube type heat exchangers are arranged to surround a fan and an air pressure loss of an adjacent heat exchanger disposed adjacent to an air inlet, is larger than the air pressure loss of a remote heat exchanger that is disposed further from the air inlet than the adjacent heat exchanger. The air inlet is provided on an upper side of the indoor unit. A front panel is formed in the indoor unit and extends between the air inlet and an air outlet and air does not pass through the front panel.

As described in Applicants' specification in a non-limiting example, air does not pass through the front panel 8. Therefore, in a case in which louvered portions are provided in the lower front heat exchanger 4a, as in the upper front heat exchanger 4b and the rear heat exchanger 4c, the wind velocity near the lower front heat exchanger 4a is much lower than near the other heat exchangers 4b and 4c. When the lower front heat exchanger 4a does not have louvered portions, the air pressure loss of the lower front heat exchanger 4a disposed remotely from the air inlet 7, is smaller than the air pressure losses of the upper front heat exchanger 4b and the lower rear heat exchanger 4c disposed near the air inlet 7. Because the air pressure loss of the lower front heat exchanger 4a is smaller than those of the upper front heat exchanger 4b and the rear heat exchanger 4c, the wind velocity on the lower side of the heat exchanger increases and the intensity of the turbulence generated around the vortex in the circulating fan increases. Thus, the static pressure in the vortex decreases and the efficiency of the circulating fan increases.

The Examiner alleges that Kusuhara discloses that the air pressure loss of an adjacent heat exchanger disposed adjacent the upper inlet is larger than the air pressure loss over remote heat exchanger. In the response to arguments the Examiner states that he points out in the rejection that the remote heat exchanger 112 has no louvers to lower pressure loss in comparison to the louvered upper heat exchangers. It appears that the Examiner is relying on Applicants' arrangement to support this argument. However, Kusuhara does not have the same arrangement, for example, as Applicants' Fig. 1 where air does not pass through the front panel 8. In Kusuhara, as shown in drawing 12, suction openings 105 are provided at the top and the front panel. Drawing 12 of Kusuhara will have different pressure

characteristics than Fig. 1 of Applicants' specification. Thus, the Examiner has not provided sufficient support for his allegation that in Kusuhara the remote heat exchanger does not have louvers and therefore pressure loss will be lower in comparison to the louvered upper heat exchangers.

Applicants' independent claim 8 is directed to an indoor unit of an air conditioner. A plurality of fin-tube type heat exchangers include an adjacent heat exchanger disposed adjacent to an air inlet and a remote heat exchanger disposed further from the air inlet than the adjacent heat exchanger. An auxiliary heat exchanger is provided on an air upstream side of the remote heat exchanger. A front panel is formed in the indoor unit through which no air passes. A space is provided below the front panel opposite the auxiliary heat exchanger to pass air therethrough. The front panel extends between the air inlet and the space.

Futagami discloses an air conditioner having a base with suction openings 4 formed in the front top and the upper surface of the main part 1 including the front panel 3.

Likewise, Kusuhara discloses in Fig. 12 suction openings 105 formed in a top portion and a front panel portion. Thus, Applicants' independent claim 8 is distinguishable over Futagami as well as Kusuhara in view of Futagami.

The Examiner alleges at page 3 of the Office Action that Kusuhara discloses in Fig. 1 that a panel 103 is formed in the indoor unit and air does not pass through the front panel. However, Kusuhara clearly discloses that element 103 in drawing 12 is the rear guider.

The dependent claims are allowable for at least the reasons discussed above as well as for the individual features they recite.

The Itagaki, Kitazawa and Mukoda references do not overcome the deficiencies of Kusuhara and Futagami noted above.

Early and favorable action with respect to this application is respectfully requested.

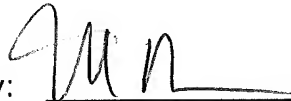
Should any questions arise in connection with this application or should the Examiner believe that a telephone conference with the undersigned would be helpful in resolving any remaining issues pertaining to this application, the undersigned respectfully requests that he be contacted at the number indicated below.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

Date: September 16, 2010

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